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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,884	06/29/2000	Kazushi Honda	193857US2	7308

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

GROSS, KENNETH A

ART UNIT	PAPER NUMBER
2122	12

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/605,884

Applicant(s)

HONDA, KAZUSHI

Examiner

Kenneth A Gross

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,7-9,11,15,16,18,19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7-9, 11, 15, 16, 18, 19, and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim objected to because of the following informalities: Claim 1 recites “a set of a name” on lines 5-6, which should read “a set of names”. Claim 1 recites “configure to” on line 19 which should read “configured to”. Claim 3 recites “each data type of multiphase data type” on line 6, which should read “each data type of a multiphase data type”. Claim 3 recites “a third updating module configured not to, if the instantiation information of the data type of which instantiation is requested is not registered, generate the instance of the data type definition in the source program”. For the interest of clarity, this should read “a third updating module configured, if the instantiation information of the data type of which instantiation is requested is not registered, not to generate the instance of the data type definition in the source program”. Claim 8 recites “an unique name” on line 3. This should read “a unique name”. Appropriate correction is required. Please correct similar errors in all corresponding claims.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1, 3, 7-9, 11, 15, 16, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In regard to Claim 1, the limitation “use flag of the name” is unclear (line 7). Does this mean that the use flag has the same name as the data type definition, or the flag is associated with the data type definition with a certain name? In regard to Claim 7, the limitation “when the data type is the multiphase type holding member function” which is unclear. What is a “holding member function” (lines 2-3)? Perhaps this means that the multiphase type contains a member function defined with the type? Claim 7 also recites “the third source updating module determines member function” (line 5) which is unclear. What does it mean to “determine member function”? Perhaps this means “determines a member function” Claim 7 recites “the instance of which is to be actually generated” (line 6). What does it mean for an instance to be “actually generated” and what is the difference between “actual generation” and “generation”? Appropriate correction is required. Please correct similar errors in corresponding Claims 9 and 15. Claims 3, 8, 11, and 16 are rejected for being dependent on a rejected parent claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 7-9, 11, 15, 16, 18, 19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palay et al. (U.S. Patent Number 5,613,120) in view of Nackman et al. (U.S. Patent Number 6,182,281).

In regard to Claim 1, Palay teaches a class definition table (Column 12, lines 15-17) and a linker that removes data type definitions from the object file when the definition is already stored in the class definition table (Column 28, lines 39-61). Palay further teaches a data type definition detector configured to detect a predetermined data type in a source program (Column 12, lines 7-14), as well as a first table updating module configured to, if a name of the detected data type definition is not registered, register the name of the detected data type definition in the table (Column 12, lines 48-51).

Palay does not teach a preprocessor and a language processor. Nackman, however, does teach: (a) a preprocessor configured to execute preprocessing of source programs (Column 18, lines 44-50); (b) a language processor configured to compile the source programs (Column 18, lines 3-13).

Neither Palay nor Nackman teach a use flag, which is set in use status when a data type definition is described in a body of any of all source programs to be linked to the one object program nor do they teach a second table updating module configured to, if the data type definition is described in the body of any of the source programs to be linked into the one object program, set the use flag to a use status, and a second source updating module configured to delete the data type definition of which the use flag is set to the use status from all the source programs to optimize the source programs. However, the Background section of the present invention does include as admitted prior art a use flag with the name of the data type definition (Page 7, lines 9-13). The Background further includes setting the flag to a use status if the data type definition is described in the source program, and deleting the definitions that have the use flag set (Page 7, lines 7-13 and lines 24-25).

Neither Palay or Nackman teach a first source updating module configured to, if the name of the detected data type definition is registered, delete the data type definition in the source program. However, the Background section of the present invention does include as admitted prior art deleting duplicate definitions in a source file when a definition is defined more than once (Page 7, lines 24-25).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to develop a system with a class definition table, a linker that removes data type definitions from the object file when the definition is already stored in the class definition table, a data type definition detector configured to detect a predetermined data type in a source program and a first table updating module configured to, if a name of the detected data type definition is not registered, register the name of the detected data type definition in the table, as taught by Palay, where the system further includes a preprocessor and compiler, as taught by Nackman, since these are well known elements used for compiling a source program, the system also including a use flag as well as a first and second source updating module, and a second table, as taught in the Background section of the present invention, since this allows a reduction of code size by removing unnecessary code.

Claims 9, 16, and 19 are method, medium, and product claims that correspond with Claim 1, and are rejected for the same reasons as Claim 1, where Palay teaches a method (Figure 5), medium (Column 34, lines 18-39), and product (Column 33, lines 8-33) corresponding to said system of Claim 1.

Claim 21 contains limitations that have already been addressed in the rejection of Claim 1, and Claim 21 is rejected for the same reasons as Claim 1, where the Background section of the present application admits as prior art using multiphase data definitions.

Claims 22-24 are method, medium, and product claims that correspond with Claim 21, and are rejected for the same reasons as Claim 21, where Palay teaches a method (Figure 5), medium (Column 34, lines 18-39), and product (Column 33, lines 8-33) corresponding to said system of Claim 21.

In regard to Claim 3, Palay teaches an instantiation request detector configured to detect an instantiation request of a data type definition in the source program (Column 12, lines 18-19); a third table updating module configured to, if instantiation information arranged for a data type is not registered, register the instantiation information in the data type definition table (Column 12, lines 18-19); and a third updating module configured not to, if the instantiation information of the data type of which instantiation is requested is not registered, generate the instance of the data type definition in the source program (Column 29, lines 13-16).

Claims 11 and 18 are method and medium claims that correspond with Claim 3, and are rejected for the same reasons as Claim 3, where Palay teaches a method (Figure 5) and medium (Column 34, lines 18-39) corresponding to said system of Claim 3.

In regard to Claim 7, neither Palay nor Nackman teach that the data type definition table includes member usage information representing, when the data type is the multiphase type holding member function, whether each member function is used or not and the third source updating module determines member function of the multiphase type the instance of which is to be actually generated in the source program with reference to the member usage information in

the data type definition table. However, the Background section of the present invention does include as admitted prior art member usage information (Page 7, lines 7-13) and a determination of the member function instance to be generated (Page 5, lines 10-21).

In regard to Claim 8, neither Palay nor Nackman teach that the third source-updating module converts the name of the data definition into a unique name in a source program. However, the Background section of the present invention does include as admitted prior art unique names for data definitions (Page 4, lines 3-8).

Claim 15 is a method Claim that corresponds with Claim 7, and Claim 15 is rejected for the same reasons as Claim 7, where Palay teaches a method (Figure 5) corresponding to said system of Claim 7.

Response to Arguments

6. Applicant's arguments filed February 24th, 2004 have been fully considered but they are not persuasive. Specifically, the applicant claims that the amendments to the claims overcome the art provided in the previous rejection. However, a new rejection is presented above with specific teachings in the Background section of the present application, which teaches newly amended limitations as well as previously presented limitations, and thus can be used as admitted prior art.

In regard to the newly amended claims and new claims, it is necessary when adding newly amended claims or new claims, to point out specifically where in the specification the

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amended limitations are taught, so as to insure that the newly amended limitations do not contain new matter.

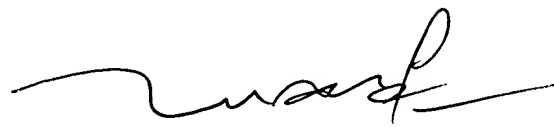
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KAG



TUAN DAM
SUPERVISORY PATENT EXAMINER